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## NURSING IN PNEUMONIA

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WHILE the care of a patient during an attack of pneumonia should have the strictest medical supervision, if no complications occur nursing is considered rather more important than treatment. The kind and degree of knowledge necessary for physician and nurse differs widely, but an intelligent understanding of some of the more important clinical features of the disease will greatly aid the nurse in helping to conduct the patient safely through the attack. For instance, if she have some knowledge of the cause of the poison produced in the air-cells of the lungs, she will more readily appreciate the measures taken to resist its activity, and will realize the importance of husbanding the vitality and endurance of the patient to combat the growth of this cause.

The initial symptoms and their increase in severity during the first week-the changes taking place in the lungs during different stages of the disease, the character of the expectoration, the regularity and frequency of the pulse-rate, and the probable time of crisis are important points to be noted in each case. There are many types of the disease, some of these types being especially serious in young children, the aged, and people of intemperate habits.

To prevent exhaustion by maintaining the forces of the patient is the great object of the nursing care of pneumonia. To this end absolute rest in bed should be enforced from the beginning of the attack. In bedmaking, in administering treatment, as well as in the care essential for perfect cleanliness, an important principle to be observed is to save the patient all unnecessary exertion and fatigue in every possible way.

Comfort in bed depends largely upon the adjustment of the pillows in a way to sustain the patient in the position he is best able to 36

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assume. The shoulders principally should be supported, as breathing is easier for this support. If only one lung is affected, the patient usually prefers to lie upon the side involved in order to give the sound lung more breathing capacity. Warmth, light covering, and freedom of movement for the extremities are also essential.

In many instances severe pain in the side is present, especially during an attack of coughing. A swathe pinned tightly about the thorax lessens this by diminishing expansion of the chest.

The importance of air fresh with as much oxygen as possible has led to the custom of placing the beds of patients suffering from chest complaints near open windows. This, however, requires judicious management in pneumonia, for while an abundant supply of fresh air is indispensable, draughts should be avoided, lest perspiration be checked or a distressing attack of coughing be brought on. Often there is more or less exposure during the examination of the chest by the physician, and at this time provision against draughts should be arranged for by the use of screens or hangings.

Since one cause of exhaustion in pneumonia is high temperature, just how far it should be reduced and the means to be resorted to for this purpose are questions of importance. Although pyrexia is not long continued, if the temperature reach a height of 104 degrees or above, it is usually thought best to reduce it, and the external use of cold is preferred by many physicians rather than large doses of antipyretic drugs.

Probably at no stage of the nursing in pneumonia is the nurse intrusted with more responsibility than when giving treatment in the form of a cold bath, especially should it be considered necessary to reduce temperature by this means near the time of crisis. Any weakening of the pulse or tendency to collapse should call for an immediate withdrawal of the application of cold.

Among medicinal antipyretics may be mentioned quinine. Its use is not considered justifiable by physicians generally, because in order to obtain from it any effect upon the temperature it is necessary to administer it in large doses, which are disturbing to the system.

A serious objection to the use of hot applications to the chest, such as poultices or fomentations, is the retention of heat in the body. When chest applications require frequent renewal, the bedgown worn should be arranged to allow free access to the chest in order to avoid any extra exertion on the part of the patient. Poultices made in the form of jackets should be light, lest breathing be interfered with.

An instance is related where the pneumonia patients on one side of a hospital ward were treated by the use of chest poultices, and those

on the opposite were protected with cotton jackets and given large doses of antipyretic drugs, a lively interest being manifested by physicians and nurses as to which form of treatment proved more beneficial. In those days the use of hydrotherapy for reducing temperature in pneumonia would not have been in favor, and treatment directed against the growth of the pneumococcus had not yet been inaugurated.

Delirium, so often present during the acute stages, demands careful watchfulness on the part of the nurse, as it is considered dangerous to restrain the movements of the patient lest he become exhausted by efforts to resist the restraint. Much can be done to soothe delirium by tepid sponging or giving a warm drink.

The quantity of sputum should be carefully observed, as an absence of expectoration in the commencement of the disease is considered unfavorable. It is of a viscid, tenacious appearance, and an iron-rust color is common rather than streaks of clear blood in the mucus. Since pneumonia is known to be infectious through the sputum, great care should be taken with its disposal. A sputum-cup lined with white paper which can be taken out and burned and the cup subjected to frequent boiling should be used.

The diet should be simple and nutritious. It should be light enough not to excite cough in swallowing nor to increase dyspnæa by distention of the stomach. An over-nutritious diet tends to weaken the action of the heart by overtaxing the digestive powers. Food need not usually be given oftener than every two hours. If milk be well borne, it is advisable to give this alone while the acute stages last.

Quantities of fluid other than the amount required for nutrition tend to embarrass breathing by filling the stomach and causing pressure upon the diaphragm. It is well to prolong the liquid diet for a few days after the crisis has occurred for fear of a return of the fever, although if strength be slow in returning, a little properly prepared solid food may be given, such as scraped beef, milk toast, or a soft-boiled egg.

The crisis, which occurs about the seventh or ninth day, is an anxious period, since it is the turning-point of the disease. With the sudden fall of the temperature there is profuse perspiration accompanied by some prostration, and the nurse must be on guard at this time, noting any change in pulse-rate, marked dyspnæa, or coldness of the extremities.

The usual causes of death in pneumonia other than general exhaustion are failure of the heart and the respiratory forces, and important drugs which act as stimulants both to the respiration and circulation are the four alkaloids—strychnine, cocaine, atropine, and caffeine.

Although convalescence usually follows rapidly after the termination of the disease by crisis, all danger is not then over, and recovery, especially in aged persons, must be promoted by a careful dietetic treatment. The diet at this time should be especially nourishing, and after the regulation three meals a day have been resumed it is well to give some light form of nourishment at regular intervals between meals.

A change of air is also considered beneficial, the chief points in selection of climate being mildness and absence of strong winds and dampness, especially during the winter months.

Rest during convalescence should be mental as well as physical, for if the attack has been severe, the nervous system has been subjected to more or less strain.

## A VISIT TO A MEXICAN COTTON PLANTATION

By BESSIE H. STEELE Graduate Michael Reese Hospital, Chicago

My first visit to a cotton-field was made during a stay at New Orleans some years ago, but things are done on a scale so much larger on Mexican plantations that I was delighted when we received an invitation from Dr. Brodrick to become his guests and view the broad acres of the Tlahualilo Company in the State of Durango.

This ranch contains one hundred thousand acres, the greater part of which are under cultivation, and employs seven thousand Mexican laborers (peons), all of whom reside on the property with their families, forming villages around the ranch-houses, which are called in Spanish haciendas. Each hacienda (of which there are ten) has its own administrador and its own little village of adobe huts, which are occupied by the peons. In addition, there is the administrador en general and staff in Zaragoza, while the head offices, with the general manager, are located in Mexico City. The resident Americans include a doctor, a civil engineer, cotton sampler, etc., while all the clerical work is in charge of a Spaniard with Mexican assistants. There is also a native school-teacher and a Mexican padre (priest), who officiates at the little Catholic chapel and collects his fees from his parishioners.

We arrived at ranch head-quarters on a Friday night, and the next morning were taken by the doctor to the tramway, where an engine stood ready to make the rounds of all the fields, to collect the cotton-cars from the different *haciendas* to be brought to the gin at Tlahualilo,